111 Dart Aerospace Ltd. Wednesday, 27/08/2008 11:24:51 AM Date: User: Julie Lecocq **Process Sheet Drawing Name** : BEAM ASSEMBLY Customer : CU-DAR001 Dart Helicopters Services Job Number : 41631 : 10407 **Estimate Number** : D3173041 Part Number P.O. Number : D3173 REV B : 27/08/2008 S.O. No. : **Drawing Number** This Issue : N/A : NC Project Number Prsht Rev. : B : // : MACHINED PARTS First Issue Type **Drawing Revision** : 41268 Material **Previous Run** : 15/09/2008 Qty: 4 Um: Due Date Written By Checked & Approved By Comment : Est. A 02.12.05 Additional Product Job Number: Description: Seq. #: **Machine Or Operation:** M6061T6TR40X20W125 6061-T6 Rect Tube 4.0 x 2.0 x .125w 1.0 Comment: Qty.: 4.9219 f(s)/Unit Total: 19.6875 f(s) 2x 109025 6061-T6 Rect Tube W.125 Material: 6061-T6 (QQ-A-200/8) Rect. Tube 4" x 2" x 0.125 thick 2x 109088 (M6061T6TR4.0x2.0W125) Batch BAND SAW 2.0 BAND SAW Comment: BAND SAW Cut blank: 56" long Machine holes as per Folio FA295 and Dwg D3173 02/08/30 Identify as D3173-1 HAAS CNC VERTICAL MACHINING #1 HAAS1 3.0 Comment: HAAS CNC VERTICAL MACHINING #1 Machine holes as per Folio FA295 and Dwg D3173Identify as D3173-1 INSPECT PARTS AS THEY COME OFF MACHINE 4.0 QC2

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

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5.0 QC8 SECOND CHECK

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Comment: SECOND CHECK



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Wednesday, 27/08/2008 11:24:51 AM Date: User:<sub>▼</sub> Julie Lecocq **Process Sheet Drawing Name: BEAM ASSEMBLY** Customer: CU-DAR001 Dart Helicopters Services Part Number: D3173041 Job Number: 41631 Job Number: Seq. #: Machine Or Operation: Description: SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1 6.0 Comment: SMALL & MEDIUM FAB RESOURCE 1 Deburr 7.0 ACE DIX SECOND CHECK Comment: SECOND SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1 8.0 Comment: SMALL & MEDIUM FAB RESOURCE 1 Drill Ø0.316" holes as per Dwg D3173 C'sink holes as per Dwg D3173 INSPECT WORK TO CURRENT STEP 9.0 QC5 Comment: INSPECT WORK TO CURRENT STEP 10.0 HAND FINISHING HAND FINISHING RESOURCE #1 Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1 11.0 D3178041 **Nut Plate** Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s) Nut Plate Pick K10017. Install Nut Plate as per Dwg D3173. D3178-041 is included in K10017 BOM. Pick: Qty Part Number Description Batch 2 **Nut Plate** D3178-041 12.0 MS20601AD4W4 Comment: Qty.: 8.0000 Each(s)/Unit Total: 32.0000 Each(s) Rivet Pick: Qty Description Part Number Batch

MS20601AD4W4

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Part No: <u>D3173-041</u> P	AR #: Fault Category:	NCR: Yes No DQA:	Date:
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		Description of NC	of NC Corrective Action Section B			Verification	Approval	Approval			
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Date: Wednesday, 27/08/2008 11:24:51 AM User: Julie Lecocq **Process Sheet** Drawing Name: BEAM ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Part Number: D3173041 Job Number: 41631 Job Number: Seq. #: Description: **Machine Or Operation:** 13.0 INSPECT WORK TO CURRENT STEP QC5 Comment: INSPECT WORK TO CURRENT STEP POWDER COATING POWDER COATING 14.0 08523 Comment: POWDER COATING Powder Coat Gloss White (Ref: 4.3.5.1) per QSI 005 4.3 Ensure Nut Plate thread is covered. START TIME: **OVEN TEMPERATURE:** FINISH TIME: 15.0 QC3 INSPECT POWDER COAT/CH Comment: INSPEC POWDER COAT/CHEMICAL CONVERSION 16.0 D3175041 Mounting Lug Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s) Mounting Lug Assemble per Dwg D3173. Install Mounting Lug as per Dwg D3173. D3175-041 is included in K10017 BOM. Pick: Description Qty Part Number 2 D3175-041 Mtg Lug 17.0 AN35A Comment: Qty.: 8.0000 Each(s)/Unit Total: 32.0000 Each(s) Bolt Pick: Qty Part Number Description M100188 8 AN3-5A Bolt 18.0 AN523A Bolt Comment: Qty.: 8.0000 Each(s) 2.0000 Each(s)/Unit Total: Bolt 1419278 Pick: Qty Description Part Number AN5-23A Bolt

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Wednesday, 27/08/2008 11:24:51 AM Date: User: Julie Lecocq **Process Sheet** Drawing Name: BEAM ASSEMBLY Customer: CU-DAR001 Dart Helicopters Services Job Number: 41631 Part Number: D3173041 Job Number: Seq. #: Description: **Machine Or Operation:** AN960JD10 19.0 Washer Comment: Qty.: 8.0000 Each(s)/Unit Total: 32.0000 Each(s) Washer Pick: Description Qty Part Number AN960JD10 Washer AN960JD516 20.0 Comment: Qty.: 4.0000 Each(s)/Unit Total: 16.0000 Each(s) Washer Pick: Qty Part Number Description AN960JD516 Washer MS21042L5 21.0 Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s) Nut Pick: Description Qty Part Number MS21042L5 2 Nut SMALL & MEDIUM FAB RESOURCE 1 22.0 SMALL FAB 1 Comment: SMALL & MEDIUM FAB RESOURCE 1 Assemble per Dwg D3173. Install Mounting Lug as per Dwg D3173. D3175-041 is included in K10017 BOM. INSPECT WORK TO CURRENT STEP 23.0 QC5 Comment: INSPECT WORK TO CURRENT STEP PACKAGING 1 PACKAGING RESOURCE #1 24.0 Comment: PACKAGING RESOURCE #1 Identify as D3173-041 and Pack with D130-701-041 Location: 303

Page 4

Form: rprocess

# **Dart Aerospace Ltd**

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W/O:			WORK ORDER CHANGES							
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Date:

Wednesday, 27/08/2008 11:24:51 AM

User; Julie Lecocq

**Process Sheet** 

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BEAM ASSEMBLY

Job Number: 41631

Part Number: D3173041

Job Number:



Seq. #:

**Machine Or Operation:** 

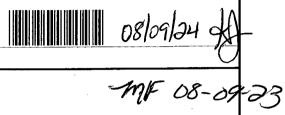
Description:

25.0

QC21

FINAL INSPECTION/W/O RELEASE

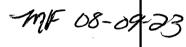




Comment: FINAL INSPECTION/W/O RELEASE

Job Completion





## **Dart Aerospace Ltd**

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D3065-5DART AEROSPACE LTD	Work Order:	+1431
Description: Beam	Part Number:	D3173-1
Inspection Dwg: D3173 Rev: B		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

X First Article	Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
56.00	+/-0.030	56.00	/			
23.629	+/-0.010	23.630	~			
15.33	+/-0.030	15.330	~			
2.00	+/-0.030	2.007	<u> </u>			
4.00	+/-0.030	3.990				
0.500	+/-0.010	0.5025	<b>V</b>			
1.720	+/-0.005	1.718	V			
1.000	+/-0.005	७. १११				
0.860	+/-0.005	0.859	V			
Ø0.203	+0.005/-0.000	Ø 5.204	/			
Ø0.129	+0.005/-0.000	Ø G. 130	<b>V</b>			
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Measured by:	H.A	Audited by:	and	Prototype Approval:	N/A
Date:	08/08/30	Date:	08/08/30	Date:	N/A

Rev	Date	Change		Revised by	Approved
Α	04.02.25	New Issue	P/O D3173-041	KJ/RF	





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	CHECK	ŒD,	APPROVED	DRAWING NO.	REV. B
1		#	<del>-</del> #	D3173 shi	ET 1 OF 3
	DATE		<u> </u>	TITLE	SCALE
	03.0	1.07		BEAM ASSEMBLY	NTS
	Α		02.12.03	NEW ISSUE	
	В		03.01.07	REMOVE PIP PINS	

### **PARTS LIST**

QTY	PART NUMBER	DESCRIPTION
X	D3173-041	BEAM ASSEMBLY
1	D3173-1	BEAM
2	D3175-041	MOUNTING LUG
2	D3178-041	NUT PLATE
8	AN960JD10	WASHER
4	AN960JD516	WASHER
2	MS21042L5	NUT :
8	MS20601AD4W4	RIVET
8	AN3-5A	BOLT
2	AN5-23A	BOLT

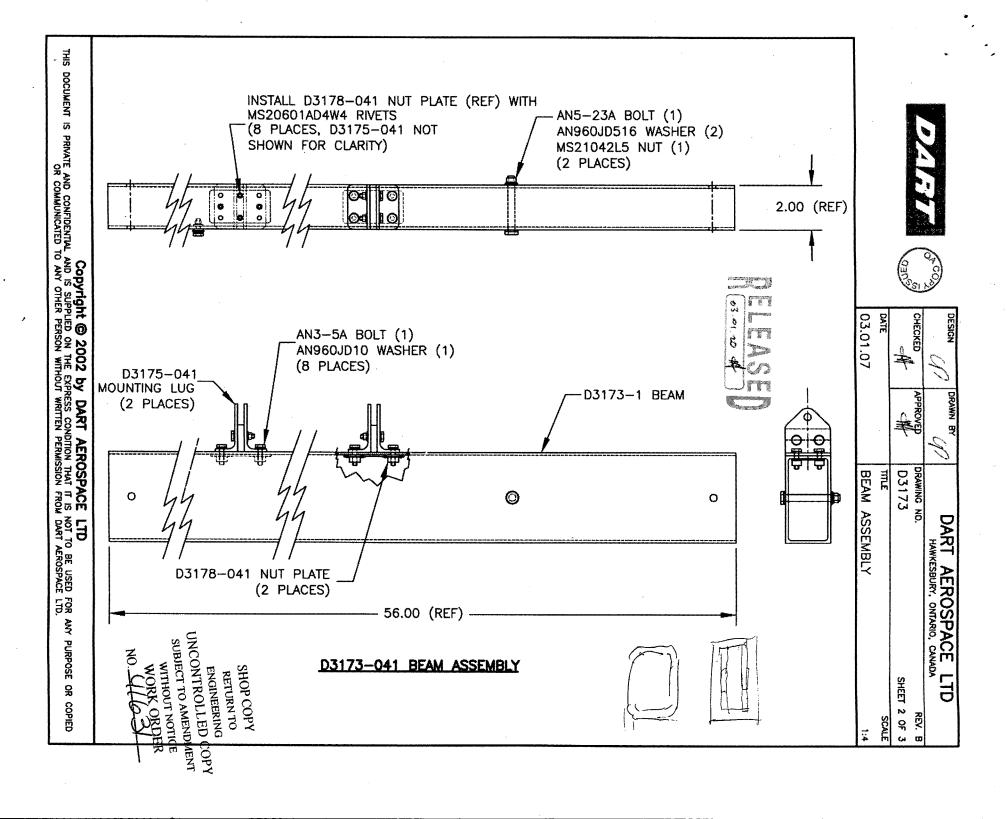
#### **NOTES**

#### D3173-1 BEAM:

- 1) PART IS SYMMETRICAL ABOUT CENTERLINE
- 2) MATERIAL: 6061-T6 RECTANGULAR TUBING, 4" x 2" x 0.125" WALL (QQ-A-200/8) (REF DART SPEC. M6061T6TR4.0x2.0W125
- 3) BREAK ALL SHARP EDGES 0.010-0.020
- 4) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3 OUTSIDE ONLY
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES



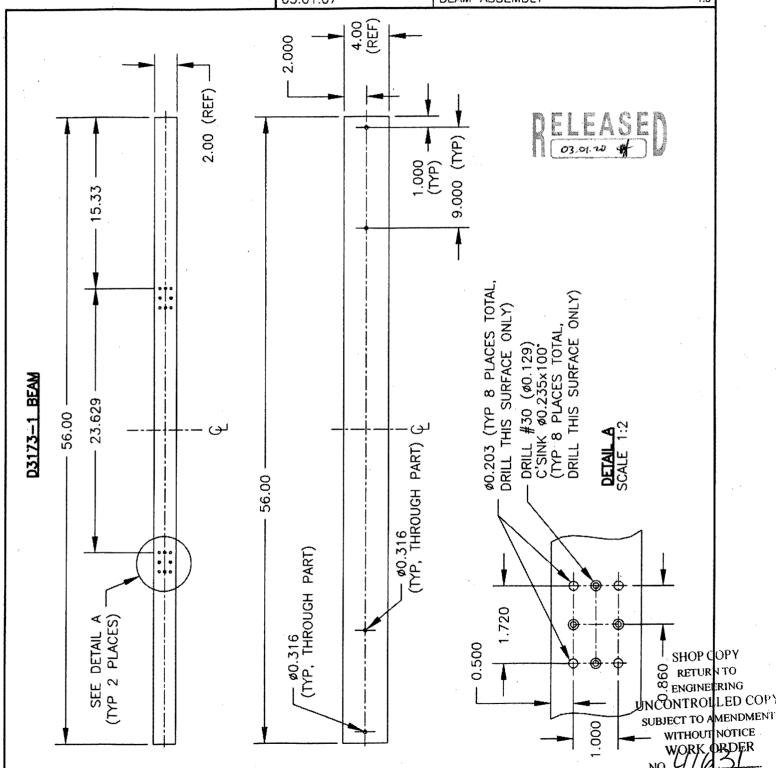
SHOP COPY RETURN TO ENGINEERING UNCONTROLLED COFY SUBJECT TO AMENDMEN WITHOUT NOTICE WORK ORDER







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	DESIGN DRAWN BY		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
1	CHECKED ,	APPROVED	DRAWING NO.	R	EV.	8
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	03.01.07		BEAM ASSEMBLY		1	:8



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